

What is claimed is:

1. A clear transparent composite material for use as a sun shade or blind and which comprises a film composite having a first transparent polymeric film layer with a further transparent polymeric film layer adhered to one side of the first film layer using
5 an adhesive, wherein the adhesive and at least one of said two polymeric film layers contain fire retardant material, the composite having a visible light transmission of between 1-90% and a haze value of less than 10%.
2. A composite as claimed in Claim 1 wherein the first film layer has a metallized layer
10 on said one side and the adhesive is applied over the metallized layer.
3. A material as claimed in Claim 2 wherein the metallized layer comprises a vacuum deposition of aluminium or an aluminium alloy, preferably visible light transmission of less than 30%.
- 15 4. A material as claimed in Claim 3 wherein the visible light transmission is less than 5%.
5. A material as claimed Claim 1 wherein the two polymeric film layers comprise PET film.
- 20 6. A material as claimed in Claim 5 wherein at least the further film layer includes a UV absorbing material.
7. A material as claimed in Claim 1 wherein the adhesive contains a fire retardant such
25 that the composite has a haze of about 5%.or less.

8. A material as Claimed in Claim 7, wherein the adhesive is a polyurethane resin and the fire retardant is at least one of a brominated and a phosphorous based compounds.

5 9. A material as claimed in Claim 8, wherein the dried adhesive may contain 5-15% by weight of the fire retardant .

10. A material as claimed in Claim 1 having a scratch resistant layer coated onto the further film layer.

10

11. A solar control sun shade comprising as the shade material, a clear transparent film composite comprising a first transparent polymeric film layer having a further transparent polymeric film layer adhered to one side of the first film layer using an adhesive, wherein the adhesive and at least one of said two polymeric film layers

15 contain fire retardant material, the composite having a visible light transmission of between 1-90% and a haze value of less than 10%.

12. A sun shade as claimed in Claim 11 wherein the first film layer has a metallised layer deposited on said one side thereof.

20

13. A sun shade as claimed in Claim 12 wherein the metallized layer comprise aluminium or aluminium alloy , the two polymeric layer comprise PET film , and the composite has a haze value of less than 5%

14. A sun shade as Claimed in Claim 11, wherein the fire retardant material is one of a brominated and a phosphorous based compounds .

15 A sun shade as claimed in Claim 13, wherein the fire retardant is one of a tetrabromo bis phenol "A " and Rescorcinol bis (diphenyl phosphate).

16. A sun shade as claimed in Claim 15, wherein the dried adhesive contains 5-15% by weight of the fire retardant .

10 17. A sun shade as claimed in Claim 11 and which also functions as a sound absorbing elements, the composite having spaced apart micro-perforations therein.

18. A sun shade as claimed in Claim 11 and which as functions as sound absorbing element wherein the composite is formed with a plurality of adjacent cup shaped
15 recesses arranged in the form of a grid.

19. A dual function sun shade and sound absorber comprising a transparent clear film composite having a first transparent PET film layer with a further transparent PET film layer adhered to one side thereof using adhesive, wherein the adhesive and at least
20 one of said two PET film layers contains a fire retardant material, the composite having a visible light transmission of between 1-90% and a haze value of less than 10% , and spaced apart micro-perforations therein.

20. A shade as claimed in Claim 19 wherein the first film layer has an aluminium layer deposited on one side thereof with a visible light transmission is between 2-30% and the micro-perforation are spaced apart 2.0mm or less.

5

10

15

20

25